

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: A summary of the limiting dilution analyses.

File Name: Supplementary Data 2

Description: (a) A summary of primary and secondary transplantation studies of CB-derived $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ cells. (b) A summary of the multi-lineage differentiation potentials of $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ SRCs in the primary recipient mice. (c) A summary of the multi-lineage differentiation potentials of $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ SRCs in the secondary recipient mice receiving whole BM cells. (d) A summary of multi-lineage differentiation potentials of $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ SRCs in the secondary recipient mice receiving resorted $18\text{Lin}^- \text{CD}34^+$ and $18\text{Lin}^- \text{CD}34^-$ cells.

File Name: Supplementary Data 3

Description: (a) A summary of single $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ cell transplantation studies. (b) A summary of the multi-lineage differentiation potentials of single $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ SRCs in the primary recipient mice. (c) A summary of the multi-lineage differentiation potentials of single $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ SRCs in the secondary recipient mice. (d) A summary of the multi-lineage differentiation potentials of single $18\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}133^+ \text{GPI-}80^+$ and $18\text{Lin}^- \text{CD}34^- \text{CD}133^+ \text{GPI-}80^+$ SRCs in the tertiary recipient mice.

File Name: Supplementary Data 4

Description: A summary of the repopulation activities of $9\text{Lin}^- \text{CD}34^+ \text{CD}38^- \text{CD}45\text{RA}^- \text{CD}90^+ 49f^{+/-}$ and $9\text{Lin}^- \text{CD}34^-$ cells generated from $\text{CD}34^+$ and $\text{CD}34^-$ SRCs after co-culture with DP MSCs.

File Name: Supplementary Data 5

Description: List of antibodies used in this study.

File Name: Supplementary Data 6

Description: The immunophenotypes of target cells for single-cell PCR.

File Name: Supplementary Data 7

Description: Primer sets used for single-cell real-time RT-PCR.